A COMPARATIVE STUDY OF MENTAL TOUGHNESS BETWEEN TEAM GAME AND INDIVIDUAL GAME PLAYERS

A Proposal

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1. INTRODUCTION

Sport is becoming an integral part of human life. From very simple beginning it has now become highly organized activity of human society. The success and failure of an athlete is dependent on the combination of physical ability, conditioning, training, mental preparation and the ability to perform well under pressure. Competitive sports demand a high level physical ability, and at the same time, they require a sharp mental focus. In a world where many athletes are physically, technically and tactically increasingly similar, it is the mind which offers perhaps the greatest scope for a competitive advantage. In today's competitive world it is very difficult to stay mentally tough and perform under tremendous pressure. More physical and mental energy is needed and for this it is essential to be mentally tough hence mental toughness is on high demand. Player are subject to performance evaluation by coaches, manager, fellow team-mates, spectators, press and media which occur before, during and post-performance. Player are expected to make a split second judgment and accurate movement or reaction to the opponent's move, often under immense pressure and tough situation, which can have far reaching effects with games at all levels. It is essential to be aware of the importance of sport psychology to assist athletes to perform sport skills better. There are also variety of factors in sport disciplines and competition in terms of the type of sports because athletes experience specific psychological behaviors. The demands in team sports are different from that of individual sports. The nature of sports makes an individual to behave in a certain manner. In group sports like football, basketball, handball and others the nature of these sports causes the athletes to commit many fouls during competition, as a result they experience negative emotion and show problematic behavior. In contrast in individual sports, athletes depend on to their individual abilities. In individual sports, performance criteria is one dimensional while in group sports performance depends on the teammates performance. In team sports, athletes are involved with teammates and spend a lot of time practicing with teammates and have more interaction with one another, in contrast in individual sports athletes spend a lot of time alone in practicing .In some of individual sports athlete have more time for mental skills practice and they do so in a quiet environment while distraction and loss of concentration are part of the team sports. In individual sports, the outcome is either winning or losing and there isn't tie, but in team sports all three results are possible.

Mental toughness: Mental toughness is one of the psychological dimensions that is considered important in performance, achievement and excellence across many domains of life Mental toughness is a term used throughout the sporting world it resides in common vocabulary of coaches, athletes, fan, and commentators across sporting context. With regards to sport, mental toughness is a term that coaches, athletes and sport psychology consultants use when discussing psychological factors that differentiate between successful and less successful athletes (Gucciardi et al., 2008; Tristan et al., 2010). Mental toughness is perhaps the single most valuable psychological characteristic in sports (Bull, Shambrook , James, and brooks, 2005; Jones, Hanton, &Connaughton, 2002).For instance a mentally tough person is described as the one who is a self-oriented person and who accepts criticism and failure without getting discouraged (Tuko and Richards,1971). Conversely Clough, Earle, and Sewell (2002)reported that mentally tough people have ‘‘a high sense of self-belief and an unshakable faith that they control their own destiny, these individuals can remain relatively unaffected by competition and adversity”. Many experts propose numerous attributes to clarify the nature of mental toughness, like not letting adverse situations affect performance (Gould et al., 1987), rebounding from failures (Woods et al., 1995), possessing superior mental skills (Bull et al., 1996), having the ability to cope with pressure (Goldberg, 1998) and being resilient (Crust, 2008). Loehr (1982) believes that mental toughness is the one factor that mediates the mind-body connection. He also describes some of the characteristics of a mentally tough athlete, including self-motivated, positive and realistic, emotional control, calmness, being highly energetic, determined, focused, self-confident, and responsible. Mental Toughness can be described as having the psychological edge that allows athletes to reach optimal performance states regardless of obstacles and/or adversity (Burton &Raedeke, 2008; Crust, 2008; Jones et al., 2002). Mental Toughness is also a concept that can be learned by athletes through systematic, long-term psycho educational training in Mental skills and is important to promoting ideal performance in critical and/or adverse situations (Loehr, 1986; Parkes&Mallett, 2011). (Thewell et. al., 2005) defined mental toughness as having the natural or developed psychological edge that enables you to; always cope better than your opponents with the many demands (competition, training, lifestyle) that soccer places on the performer and specifically, be more consistent and better than your opponents in remaining determined, focused, confident, and in control under pressure. (Jones et al. 2002) suggested that Mental attributes such as (a) an unshakeable self-belief, (b) ability to bounce back from set-backs, (c)

insatiable desire and intrinsic motivation to be successful, (d) ability to remain focused in the face of distraction or unexpected events, (e) managing physical or emotional pain, (f) coping with anxiety, and (g) thriving during pressure-packed competitions are characteristics of Mentally tough athletes. Bull et al., 2005; Thelwell et al., 2005; Gucciardi et al., 2008; Gucciardi& Gordon, 2009) identified specific key psychological components that affect performance across many sports codes. These include: self-confidence, self-motivation, attention control, hardiness, enjoyment, ability to handle pressure, resilience and quality preparation. However, some dimensions are sport-specific, such as reaction time, team cohesion and team dynamics. In other words, the context of mental toughness may be determined by the nature of a specific sport (Crust, 2008; Connaughton&Hanton, 2009; Gucciardi& Gordon, 2009). Research suggests that mentally tough athletes may be better able to maintain an optimal mindset throughout competition (Cashmore, 2002), handle criticism, loses, and poor performances (Clough et al., 2002), overcome or rebound from setbacks (Jones et al., 2002), take personal responsibility for performance (Fourie&Potgieter, 2001), and remain calm and relaxed in high pressure situations (Clough et al., 2002). Additionally, the mental toughness components of confidence, anxiety management, and concentration have all been found to positively relate to athletic performance (Durand-Bush, Salmela, & Green-Demers, 2001; Meyers, Le Unes, & Bourgeois, 1996; Smith & Christensen, 1995; Smith, Schutz, Smoll, & Ptacek, 1995). The literature clearly shows that mental toughness is imperative for peak sport performance. Gould, Hodge, Peterson, and Petlichkoff (1987), Gould, Eklund, and Jackson (1993a), Williams (1998), and Gould, Dieffenbach, and Moffett (2002), all state that mental toughness is an important psychological characteristic of sport performance.

2. STATEMENT OF THE PROBLEM

Sports is an over expanding avenue of human life. Games and Sports require not only good physical fitness but also a stable mind and the athlete needs to be mentally tough. Being mentally tough helps the athlete to perform well under pressure. Mental toughness is an important skill to every athlete as this could help to prepare them when they are facing different situations in a tournament, and it is also directly related to the athletes' performance and achievement (Anderson, 1995; Eric, 2006). Hence the athlete needs to be mentally tough to perform at different levels of sports and also different sports demands different levels of

mental toughness. Individual games have a different environment compared to team games. Team game athletes spend more time with their team mates while practicing whereas individual game players spend most of the time alone, therefore their psychological being differs from each other. Keeping this concept in mind the researcher has selected the topic **"A Comparative Study of Mental Toughness between Individual Game and Team Game Players".**

3. SIGNIFICANCE

- The study will help the players and coaches to get a better insight into the questions surrounding mental toughness of the players.
- The study will help to know the mental toughness of players playing individual and team sports.
- The study will help to improve the mental toughness wherever required.

4. REVIEW OF RELATED LITERATURE

- **Graham Jones**, **Sheldon Hanton**, **Declan Connaughton** (2007) in their research "A Framework of Mental Toughness in the World's Best Performers**"**conducted an investigation of mental toughness in a sample population of athletes who have achieved ultimate sporting success. Eight Olympic or world champions, 3 coaches, and 4 sport psychologists agreed to participate. Qualitative methods addressed 3 fundamental issues: the definition of mental toughness, the identification of its essential attributes, and the development of a framework of mental toughness. Results verified the authors' earlier definition of mental toughness and identified 30 attributes that were essential to being mentally tough. These attributes clustered under 4 separate dimensions (attitude/mindset, training, competition, post competition) within an overall framework of mental toughness. Practical implications and future avenues of research involving the development of mental toughness and measurement issues are discussed.

- **Aubrey Newland, Maria Newton, Laura Finch, Colin R. Harbke, Leslie Podlog(2012)** in their research "Moderating variables in the relationship between mental toughness and performance in basketball" explored the relationship between mental toughness and basketball performance based on gender and starting status. The sample selected were male and female basketball players participating in the NCAA Division 1, 2 and 3 across USA. 197 students were selected for the study (n=197) out of which females were 53%(n=105) and males were 47%(n=92). The data was

collected using PERF statistic which calculated basketball performance and mental toughness was calculated using using a PPI-A which consisted of 14 questions. Findings showed that mental toughness can be partially used to predict basketball performance and starting status. Males had higher mental toughness than females. Starters and Non Starters did not differ in mental toughness. It was found that in males mental toughness predicted performance while the predictor of performance in females was starting status.

- **Shubhra Kathuria1, InderpreetKaurNanda(2012)** in their research "A comparative study on selective psychological variables among team game and individual game athletes" compared the psychological differences between team game and individual game players. For the purpose of this study a total of 80 players who have played at the inter college level of University of Delhi categorized as Team Game and Individual Game (40 each in team and individual games) were chosen. The data pertaining to psychological difference was collected by administering the Mental Toughness Questionnaire for measuring mental toughness along with the sub variables, self confidence, motivation, attention control, goal setting, visual & imaginary, attitude control. Psychological variables and sub variables were analyzed statistically by using Descriptive statistics and two-way ANOVA. Within the limitations of the study it was found that there was No significance difference found in the variables of Mental Toughness between Team and Individual Games.

- **Prof. Martin Gyambrah, Dr. Mark OwusuAmponsah and Ms Nicola AfuaSackey**in their research "Psychological profile assessment of mental toughness among senior high school football players in Ghana" studied the mental toughness of high school football players in Greater Accra Region of Ghana. The researcher used convenience and purposive sampling technique to select 30 male football players participating in twelve week football training programme.The mental toughness was assessed using Loehr's(1986) mental toughness test. The factors recorded for mental toughness were controlled attitude, self-confidence, positive energy, motivational level, attentional control, visualisation and imagery. Players tested average in all the factors, with controlled attitude being the highest and control of attention their lowest.

- **Baljinder Singh Bal and Davinder Singh** in their research "An Analysis of the Components of Mental Toughness in Body-Contact Sport: Keys to Athletic Success" wanted to study the role of mental toughness on performance in body contact sports. Purposive sampling technique was used to select 125 iner college body contact sport athletes in the age group between 19 to 25. The mental toughness was measured using the mental toughness battery constructed by Dr. Allan Goldberg. One way ANNOVA was used to assess the intra group differences. The results revealed significant differences among body contact sports on the ability to handle pressure, motivation and overall mental toughness. It was observed that handball player had demonstrated significantly better on ability to handle pressure, whereas football players also had demonstrated significantly better on motivation and overall mental toughness as compared to their counterpart other body contact sport athletes. However, No significant differences were found on the sub-parameters; reboundability, concentration and confidence.

5. OPERATIONAL DEFINITION

Mental Toughness: The mental toughness refers to the mental state of the athlete keeping in mind the practice session in which they will be participating.

Individual Sport: Sports in which there is a one on one competition between the players.

Team Game: Games in which a group of players in one team compete against a group of players in the opposite team.

Contact Game: Game in which there is a physical contact between the opponents.

Non Contact Game: Game in which there is no physical contact between the opponents.

National Level Players: All the male players that have represented the State of Uttar Pradesh at National level in the past two years.

6. OBJECTIVES

- To assess the Mental Toughness of Individual and Team Game National Players of Uttar Pradesh State.
- To assess the Mental Toughness of Contact and Non Contact Individual Game National Players of Uttar Pradesh State.
- To assess the Mental Toughness of Contact and Non Contact Team Game National Players of Uttar Pradesh State
- To compare the Mental Toughness of Individual Game Players and Team Game Players.
- To compare the Mental Toughness of Individual Contact Game Players and Team Contact Game Players.
- To compare the Mental Toughness of Individual Non Contact Game Players and Team Non Contact Game Players.
- To compare the Mental Toughness of Individual Non Contact Game Players and Individual Contact Game Players.
- To compare the Mental Toughness of Team Non Contact Game Players and Team Contact Game Players.
- To compare the Mental Toughness of Contact Game Players and Non Contact Game Players.

7. HYPOTHESIS

H_1-There is significant difference in the level of Mental Toughness between IndividualGame Players and Team Game Players.

H_{0-1}-There is no significant difference in the level of Mental Toughness betweenIndividual Game Players and Team Game Players.

H_2-There is a significant difference in level of Mental Toughness between Players of Non Contact and Contact Individual Games.

H_{0-2}-There is no significant difference in level of Mental Toughness between Players of Non Contact and Contact Individual Games.

H_3- There is a significant difference in level of Mental Toughness between Players of Non Contact and Contact Team Games.

H_{0-3}-There is no significant difference in level of Mental Toughness between Players of Non Contact and Contact Team Games.

H_4-There is a significant difference between the Mental Toughness between Players of Non Contact Individual Games and Non Contact Team Games.

H_{0-4}-There is no significant difference between the Mental Toughness between Players of Non Contact Individual Game and Non Contact Team Game.

H_5-There is a significant difference between Mental Toughness between Players ofContact Individual Games and Contact Team Games.

H_{0-5}-There is no significant difference between Mental Toughness between Players ofContact Individual Games and Contact Team Games.

H_6-There is a significant difference between Mental Toughness of Players of Contact Games and Non Contact Games.

H_{0-6}-There is no significant difference between Mental Toughness of Players of Contact Games and Non Contact Games

8. ASSUMPTION

- It is assumed that all the associations and clubs would grant permission to administer the study.
- It is assumed that all players will actively co-operate and fill up the questionnaire without any hesitations.
- It is assumed that all players for this study will follow the instructions and provide true information.

9. LIMITATION

- Family background, dietary habits and economic status will be the limitation of the study.
- Player'slifestyle will also be the limitation of the study.
- The answers given by players in questionnaire will be accepted to be correct and will not be cross checked. Hence it may be considered as limitation of study.

10. DELIMITATION

- The study is delimited to the Male National Players of Uttar Pradesh State.
- The study is delimited only to Mental Toughness.

11. METHOD

Descriptive comparative method will be used to assess the mental toughness of individual and team game national players of Uttar Pradesh State.

12. SAMPLING

- **Population**- All the Players that have represented the State of Uttar Pradesh. Also the Players were expected to have at least 2 years playing experience.
- **Sample**- For the present study, a total number of 400 national players (i.e. 100 Contact Individual Game Players, 100 Non Contact Individual Game Players, 100 Contact Team Game Players and 100 Non Contact Team Game Players) will be selected by Purposive Sampling Technique.

Distribution of Sample

INDIVIDUAL GAME				**TEAM GAME**			
CONTACT GAME		**NON-CONTACT GAME**		**CONTACT GAME**		**NON-CONTACT GAME**	
BOXING	WRESTLING	BADMINTON	SHOOTING	FOOTBALL	HOCKEY	CRICKET	VOLLEYBALL
50	50	50	50	50	50	50	50

13. TOOLS USED FOR DATA COLLECTION

- The mental toughness questionnaire (Dr. Allan Goldberg, 2004) will be used to evaluate the mental toughness of the subjects. This questionnaire is a Free Online Resource by Dr. Goldberg. It is a sport specific questionnaire to evaluate overall mental toughness. It consists of thirty questions. The questionnaire encompasses five subscales namely reboundability, pressure handling, confidence, concentration and motivation each consisting of six questions. The subjects had to respond by either saying True or False. Each correct answer gives one point and a wrong answer gives zero point. The score for this questionnaire ranges from zero to thirty. A score of 6 in any one of the five subscales indicates a special strength in that area. A 5 indicates solid skill and 4 or less highlights that particular area as a mental weakness that needs to be addressed. A score of 26-30 indicates strength in overall mental toughness. Scores of 23-25 indicates average to moderate skill in mental toughness. Scores of 22 or below mean that you need to start putting more time into the mental training area.

14. RESEARCH PROCEDURE

- In this study the researcher will measure the level of Mental Toughness at the end of the competition. The researcher will conduct the study on Players who have been playing for Uttar Pradesh for the last two years. Subjects will be selected by Purposive Sampling Technique.

15. STATISTICAL TECHNIQUE

Descriptive Statistics will be used to assess the score of Mental Toughness. The “Independent Sample t test”will be used to compare the Mental Toughness of Individual and Team Game Players.

16. REFERENCES

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